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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,213	07/25/2006	Yong-Il Kang	123037-06090708	7165
23429 7590 07/23/2009 LOWE HAUPTMAN HAM & BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314			EXAMINER CATTUNGAL, AJAYP	
			ART UNIT 2419	PAPER NUMBER
			MAIL DATE 07/23/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/587,213

**Applicant(s)**

KANG ET AL.

**Examiner**

AJAY P. CATTUNGAL

**Art Unit**

2419

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 07/25/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This office action has been examined. Claims 1-11 are pending.

***Response to Amendment***

2. The amendment filed on April 15, 2009 has been fully considered but are not deemed persuasive.

- Claims 1-3 and 5-11 have been amended.

***Response to Arguments***

3. Applicant's arguments with respect to claim 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Re claims 3, 7 and 10, applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-7, 8, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laksono et al. (US 2003/0156218) in view of Oz et al. (US 2002/0059638) in further view of Igarashi et al. (US 2003/0223422).

Re claims 1, 8, Laksono et al. discloses a method of distributing stream data based on a multi-path scheme using Transmission Control Protocol (TCP), the method

comprising the steps of: a) requesting an input unit to transmit stream data (Para 99 lines 1-3); b) receiving TCP packets loaded with the stream data generated in the input unit based on a TCP scheme (Para 9 lines 3-7, Para 3 lines 1-6 and Para 4 lines 7-9 teaches that data is generated in the input unit i.e. DVD player and is transmitted in an asymmetrical communication system i.e. TCP/IP); c) assigning the received stream data of the TCP packets to a specific channel (Para 223 Lines 3-8) to determine the kind of broadcasting service based on the specific channel of the received stream data (Para 3 lines 9-21 teaches that the type of channel can suggest the type of broadcasting service being used). Laksono et al. does not disclose a method of confirming a neighboring relay that requests stream data transmission of the specific channel by using a routing table; e) transmitting TCP packets loaded with the stream data to one or more neighboring relays that request stream data transmission of the specific channel according to transmission control information of a controller; and f) receiving the stream data of the specific channel from one of neighboring relays. However Oz et al discloses a method of confirming a neighboring relay that requests stream data transmission of the specific channel by using a routing table (Para 182 lines 6-10 teaches that the transmission of data is done by checking a routing table) ; e) transmitting TCP packets loaded with the stream data to one or more neighboring relays that request stream data transmission of the specific channel according to transmission control information of a controller (Para 182 lines 6-10 and Para 111 lines 3-11 teaches of transmitting streaming data over channels using TCP/IP and checking a routing table reach the destination); Oz et al. does not disclose a method of receiving the stream data of the

specific channel from one of neighboring relays. However Igarashi et al. discloses a method of receiving the stream data of the specific channel from one of neighboring relays (Para 14 lines 22-28). It would have been obvious to one having ordinary skill in the art at the time of the invention to use the choosing of a relay to receive data method of Igarashi et al. with the using of a routing table to transmit data method of Oz et al. with the transmitting of stream data of a specific channel based on the broadcasting service method of Laksono et al. in order to provide a method for multiplexing a plurality of channels within a multimedia system.

Re claims 3, 10, note that Igarashi et al. discloses a method, further comprising the steps of: i) receiving the stream data generated in the input unit from a plurality of neighboring relays (Para 14 lines 7-12 teaches of a plurality of relay routers to relay the stream data); and j) releasing a connection with other neighboring relays except a neighboring relay with the fastest transmission rate among the neighboring relays according to the transmission control information of the controller (Para 14 lines 12-22 teaches of the mobile terminal choosing a relay router based on the transmission rate and getting the data from the chosen relay router.).

Re claims 4, 11, note that Laksono et al. discloses a method, further comprising the steps of: receiving a request for the stream data transmission of the specific channel from a player (Col 99 lines 1-3); and transmitting the stream data to one or more players that make a request to transmit the stream data of the specific channel based on the TCP scheme according to transmission control information of a controller (Para 9 lines 3-7, Para 3 lines 1-6 and Para 4 lines 7-9 teaches that data is generated in the input

unit i.e. DVD player and is transmitted in a asymmetrical communication system i.e. TCP/IP).

Re claim 5, note that Oz et al. discloses a method, wherein in the step d), an internet address of the neighboring relay that makes a request to transmit the stream data to the specific channel is confirmed using the routing table storing information of the one or more neighboring relays that make a request to transmit the stream data of the specific channel (Para 182 lines 6-10 teaches of using a routing table to route some direct addressable packets which means the packets have some internet address to look up in the routing table to route the data to the destination).

Re claim 6, note that Laksono et al. discloses a method, wherein the input unit compresses moving picture data provided by a contents provider and generates the stream data in form of a frame pack including frames and header information of the compressed moving picture data (Para 217 lines 1-8).

Re claim 7, note that Laksono et al. discloses a method, wherein the controller provides the transmission control information, which includes such as changing a path, dividing a channel or merging channels to the neighboring relay based on the TCP scheme (Laksono et al. Para 82 lines 6-14 teaches of merging channels with the requested channel and transmitting data) while monitoring the bit rate of the stream data and the network states (Igarashi et al. para14 lines 12 -22 teaches of monitoring bit rate and choosing a relay with the fastest bit rate).

6. Claims 2, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Laksono et al. (US 2003/0156218) in view of Oz et al. (US 2002/0059638) modified by Igarashi et al. (US 2003/0223422) in further view of Bushmitch et al. (US 5, 928,331).

Re claim 2, 9, Laksono et al. in view of Oz et al. modified by Igarashi et al. discloses the claimed invention as set forth in claim 1 above. Laksono et al. in view of Oz et al. modified by Igarashi et al. does not disclose a method, further comprising the steps of: g) confirming that the stream data generated in the input unit is not transmitted; and h) requesting neighboring relays to transmit the stream data of the specific channel. However Bushmitch et al. discloses a method, further comprising the steps of: g) confirming that the stream data generated in the input unit is not transmitted (Col 6 lines 39-41 The admission control unit checks the catalog to determine if the selection is present, It hasn't transmitted the selection yet ); and requesting (request is sent) neighboring relays (media push engines) to transmit the stream data of the specific channel (Col 6 lines 42-50 After assuming the selection is present it send request to the media push engines to transmit the selection). It would have been obvious to one having ordinary skill in the art at the time of the invention to use the distributed multimedia streaming architecture of Bushmitch et al. with transmitting of stream data of a specific channel base on the broadcasting service method of Laksono et al. in view of Oz et al. modified by Igarashi et al. in order to provide a media delivering system for delivering media selection to one or more media clients over a multicasting network.

7. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laksono et al. (US 2003/0156218) in view of Oz et al. (US 2002/0059638) modified

by Igarashi et al. (US 2003/0223422) in further view of Ruutu et al. (US 7,092,358)

Re claims 3, 10, Laksono et al. in view of Oz et al. modified by Igarashi et al. discloses the claimed invention as set forth in claim 1 above. Laksono et al. in view of Oz et al. modified by Igarashi et al. does not disclose a method of receiving the stream data generated in the input unit from a plurality of neighboring relays; and releasing a connection with other neighboring relays except a neighboring relay with the fastest transmission rate among the neighboring relays according to transmission control information of the controller. However Ruutu et al. method of receiving the stream data (data packet) generated in the input unit from a plurality of neighboring relays (Col 10 lines 38-44 C1-C3 indicates a plurality of relays); and releasing a connection with other neighboring relays except a neighboring relay with the fastest transmission rate among the neighboring relays according to transmission control information of the controller (Col 3 line 57 – Col 4 line 6 Quality of service QoS of the data stream decides where the data should be taken from. A faster transmission rate is also indicative of the QoS of a connection. Col 10 lines 38-44 teaches that one of the plurality of relays C1-C3 is chosen to get the data) among the relays (C1-C3) according to transmission control information of the controller. It would have been obvious to one having ordinary skill in the art at the time of the invention to use the flexible Quality of Service of Ruutu et al. with transmitting of stream data of a specific channel base on the broadcasting service method of Laksono et al. in view of Oz et al. modified by Igarashi et al. in order to provide a method for multiplexing a plurality of channels within a multimedia system.



8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Laksono et al. (US 2003/0156218) in view of Oz et al. (US 2002/0059638) modified by Igarashi et al. (US 2003/0223422) in further view of Dries et al. (US 2006/0268939 A1).

Re claim 7, Laksono et al. in view of Oz et al. modified by Igarashi et al. discloses the claimed invention as set forth in claim 1 above. Laksono et al. in view of Oz et al. modified by Igarashi et al. does not disclose a method wherein the controller provides the transmission control information which includes changing a path, dividing a channel or merging channels to the neighboring relay based on the TCP scheme while monitoring the bit rate of the stream data and the network states. However Dries et al. discloses a method wherein the controller(network analyzer) provides the transmission control information which includes changing a path, dividing a channel or merging channels (merge two channels) to the neighboring relay based on the TCP scheme while monitoring the bit rate of the stream data (analyze the traffic) and the network states (Para 3 lines1-5, 10-15). It would have been obvious to one having ordinary skill in the art at the time of the invention to use the network analyzer of Dries et al with transmitting of stream data of a specific channel base on the broadcasting service method of Laksono et al. in view of Oz et al. modified by Igarashi et al. in order to provide a method for multiplexing a plurality of channels within a multimedia system.

### ***Conclusion***

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AJAY P. CATTUNGAL whose telephone number is (571)270-7525. The examiner can normally be reached on Monday- Friday 7:30 - 5:00, Alternating Fridays OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj Kumar can be reached on 571-272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. P. C./  
Examiner, Art Unit 2419

/Pankaj Kumar/  
Supervisory Patent Examiner, Art Unit 2419